

# Notice of Allowability

Application No.

10/777,157

Examiner

Terry L. Englund

Applicant(s)

MAYAMA ET AL.

Art Unit

2816

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amdt (Feb 10, 2006) and RCE (Mar 15, 2006).
2. ☒ The allowed claim(s) is/are 1, 3, 7, and 9 (now renumbered as 1-4, respectively for printing purposes).
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All b) ☐ Some\* c) ☐ None of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's ~~Amendment~~ Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

TIMOTHY P. CALLAHAN  
SUPERVISORY PATENT EXAMINER

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## **DETAILED ACTION**

### ***Response to Amendment/RCE***

The RCE submitted on Mar 15, 2006, and the amendment submitted on Feb 10, 2005, have been reviewed and considered with the following results:

The RCE was approved and entered. Therefore, the amendment was also entered.

Cancelled claims 2, 4, and 8 rendered their respective rejection(s), described in the previous Office Action, moot.

Amended claims 1 and 7 overcame the rejections of claims 1, 3, 7, and 9 under 35 U.S.C. 112 as described in the previous Office Action, and those rejections have been withdrawn.

Amended claims 1 and 7 also overcame the previous Office Action's prior art rejections. Therefore, the following rejections have also been withdrawn: 1) claims 1, 3, and 9 under 35 U.S.C. 103(a), with respect to Nadd/Pierce et al.; and 2) claims 1, 3, 7, and 9 under 35 U.S.C. 103(a), with respect to Nadd/Ebihara. None of these references shows or discloses the relationships between the third/fourth resistors, third diode, and a base of the first transistor as now recited within claim 1. For example, although Ebihara's diode 108 does have its anode connected directly to the base of first transistor 111 (e.g. see Fig. 12), the first connection point of third resistor 109, fourth resistor 112, and (the cathode of) diode 108 is not connected directly to the base.

Since the amended claims did not create any new concerns (e.g. objections or rejections under 35 U.S.C. 112), and all of the previous Office Action's claim rejections have now been withdrawn, there is no known objection or rejection remaining within the present application.

***Reasons for Allowance***

The following is an examiner's statement of reasons for allowance:

None of the prior art references reviewed and considered shows or discloses a charge pump circuit as recited within independent claim 1. More specifically, none of the references clearly shows or discloses a first connection point (i.e. understood to be a common connection of the third resistor, fourth resistor, and third diode) being directly connected to the base of the first transistor (that functions as the first switch, and is within the first follower circuit) as now recited within claim 1, upon which claims 3, 7, and 9 depend. Since there is no motivation to modify or combine any prior art reference(s) to ensure all the limitations recited within claim 1 are met, especially those with respect to the third/fourth resistors and third diode, the claims are deemed patentably distinct over the prior art of record.

Claims 1, 3, 7, and 9 are allowed, and have been renumbered as claims 1-4, respectively for printing purposes. The renumbering takes into account the cancellation of claims 2, 4-6, and 8.

Any comments considered necessary by the applicants must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication, or previous communications, from the examiner should be directed to Terry L. Englund whose telephone number is (571) 272-1743. The examiner can normally be reached Monday-Friday from 7 AM to 3 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim Callahan, can be reached on (571) 272-1740.

The new central official fax number is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-1562.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Terry L. Englund

23 March 2006